UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF COMMERCIAL FISHERIES

CALIFORNIA FISHERY MARKET NEWS MONTHLY SUMMARY

September 1966

PART II–Fishing Information*

Sea-surface temperatures, fishing and research information of interest to the West Coast tuna-fishing industry and marine scientists

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Bureau of Commercial Fisheries
Tuna Resources Laboratory
P. O. Box 271
La Jolla, California 92038

*Part 1 - "Fishery Products Production and Market Data" is issued by the Bureau of Commercial Fisheries, Market News Service, Post Office Building, San Pedro, California

1966 ALBACORE SEASON ON WAY TO NEW RECORD IN OREGON-WASHINGTON REGION

Near-perfect late summer weather and smooth seas have contributed to the making of a record albacore season in the Pacific Northwest. On September 28, Oregon-Washington landings were estimated to total 18,224,000 pounds, or only 19,326 pounds shy of the record production of 18,243,326 pounds in 1945. Conversely, California landings totalled 10,352,000 pounds, reflecting one of the poorest seasons since 1945, when 11,288,419 pounds were landed by September 30.

The 1966 albacore season has been noteworthy in several respects. The poor start in late July in Southern California offshore waters, and the early migration into the Oregon-Washington coastal region, have been noted in earlier issues of this publication. Ten-to-fifteen pound fish, normally the mainstay of the trolling fleet, have been virtually absent from waters south of Point Conception; consequently, baitboat activity has dominated the scene in this region. Few days have been classified as "hot" and most of the time marginal or "scratch" fishing has prevailed on 20-pound fish.

Upon verification of the presence of commercial quantities of albacore off Cape Blanco, Oregon in early July, most of the trolling fleet moved north during the July 16-31 interval, and very quickly engaged in good-to-outstanding fishing, mainly on 10-15 pound fish. In addition, a few large baitboats moved into Oregon waters, and logged some spectacular catches up to 1,100 fish per day in the August 1-15 period. As early as July 18, trollers experienced catches up to 425 fish per day off Coos Bay on fish averaging 13 pounds, and by August 10, 18-22 pound fish were being taken frequently 30-35 miles off the mouth of the Columbia River in 61° F. water.

Early-season landings doubtless would have been higher if the brief price dispute had not tied up the fleet temporarily on July 20. Nevertheless, good fishing close to Oregon ports caused most unloading facilities to become jammed by August 9. Onset of windy weather and rough seas contributed to the decline of fishing in the Cape Blanco-Cape Mendocino region in the latter part of August as cold upwelled water caused the albacore to move offshore and to be displaced northward to near Destruction Island by month's end. Very small fish (8-12 pounds) appeared off San Simeon and Davidson Seamount in Central California, but strong northwest winds and rough seas prevented the fleet from establishing whether or not a good body of fish was available in this region at the time.

By the end of August, limited baitboat activity was still reported on Cortez Bank off Southern California, while in the first week of September the Pacific Northwest trolling fleet had divided into two groups, one fishing off Destruction Island, Washington, reporting catches of 200-250 fish per day there, and the other moving south and fishing off Northern and Central California, reporting catches from 400 to 1,000 fish per day there.

By mid-September the first major low-pressure disturbance of the fall season had entered the Gulf of Alaska, causing the high pressure system which had dominated the Pacific Northwest weather scene to weaken and to be displaced southward. Sea temperatures 300 miles offshore from the Washington coast began to drop, while off Oregon the prevailing southwesterly wind flow inshore served to maintain sea temperatures near the coast up to 4° F. warmer than last year at this time (see fig. 3) and 2° F. warmer than the long-term average (fig. 2). Light winds and smooth seas generally have prevailed in this region since mid-September, and have contributed to the late-season flurry of activity off Oregon as the 60° F. isotherm moved toward the coast again as much as 60-100 miles.

Northern and Central California albacore fishing has improved as the winds shifted into the south and southeast quadrants, terminating large-scale upwelling, and permitting the 60° F. isotherm to "bounce back" as much as 50 miles toward the coast at the end of the month.

Small fish in the 6-8 pound size class, mixed with 20-pounders, have appeared in numbers off Davidson Seamount and 100-150 miles west of the Farallon Islands, and at the present time, appear to be sustaining most of the fishing activity in Central California.

Good fishing is expected to prevail on a north-south line approximately 100-150 miles offshore from Central California as long as good weather continues. Total albacore production for the entire U. S. West Coast, however, may fall well short of the 21-year average of approximately 42,000,000 pounds. The 1966 season will probably end up as the poorest season since 1955, when slightly less than 30,000,000 pounds were landed.

Glenn A. Flittner, Chief
Tuna Forecasting Program
October 6, 1966

WEST COAST BLUEFIN TUNA SEASON ESTABLISHES NEW PRODUCTION RECORD

The U.S. West Coast purse seine fishery for bluefin tuna is well on the way to establishing an all-time production record since commencement of the fishery in 1919. By September 24, reliable sources estimated total landings and catches still at sea exceeded 16,854 short tons, or almost 1,000 tons more than the previous record year, 1962.

Reasons for the banner production this year are severalfold. Since conversion of the high-seas baitboat fleet to purse seine equipment in 1960-61, fishing effort on bluefin has risen to new highs. The advent of modern high-capacity vessels has changed the character of the fishing fleet, and has resulted in extension of the range of the fishery up to 300 miles southward and farther offshore than in earlier years. This year, the fleet experienced favorable fishing weather in May-June, and established the earliest heavy production ever recorded. Over 5,000 tons were caught south of Punta Eugenia, Baja California, Mexico, in June; the 1945-65 average production for the month is 605 tons. The bulk of this catch consisted of 20-30 pound fish, which appear to have contributed in excess of two-thirds of the total landings to date. This year, an unusually good representation of 50-70 pound fish also appeared in the mid-season catch.

In the 1945-65 interval, the month of October has contributed an average of 553 tons to total landings of bluefin. This year, however, the cumulative catch of bluefin has risen only 250-300 tons since the last week of August. Two reasons for the failure of late-season activity off Southern California are evident: (1) the poor showing of 10-15 pound fish, normally supporting the late-season fishery, contributed little tonnage, as had been expected; and (2) most of the high seas purse seine fleet stopped fishing and returned to port to unload partial fares in preparation for departure before the yellowfin tuna fishing moratorium deadline on September 15.

Consequently, total bluefin tuna landings for 1966 should fall between 17,000 and 17,250 tons at the close of the season. Sea temperatures remain favorable, offering the opportunity for a last-minute flurry of activity in the San Clemente Island-Guadalupe region, as long as good fall weather prevails.

Glenn A. Flittner, Chief
Tuna Forecasting Program
October 6, 1966

SEA SURFACE TEMPERATURE CHARTS, EASTERN PACIFIC OCEAN

SEPTEMBER 1966

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The following organizations and stations contributed data for the September 1966 charts:

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U.S. Bureau of Commercial Fisheries Biological Laboratories, La Jolla, California; Honolulu, Hawaii; and Seattle, Washington
U.S. Naval Communication Station Balbao, Fort Amador, Canal Zone
U.S. Naval Weather Service, Fleet Numerical Weather Facility, Monterey, California
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U.S. Weather Bureau, San Diego, California
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Kelco Company, San Diego, California
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W. R. Grace and Company, New York, New York by Dr. I. William Lane
Ship Monsoon

Charts

Figure 1.--Mean sea surface temperatures (°F) derived from approximately 8000 observations. Squares show temperatures at weather ship stations. Numerals on shore are temperatures at coastal and lightship stations.

Figure 2.--Deviation of sea surface temperatures (°F) from long term charts of H.O. 225. Hatched areas are colder in 1966.

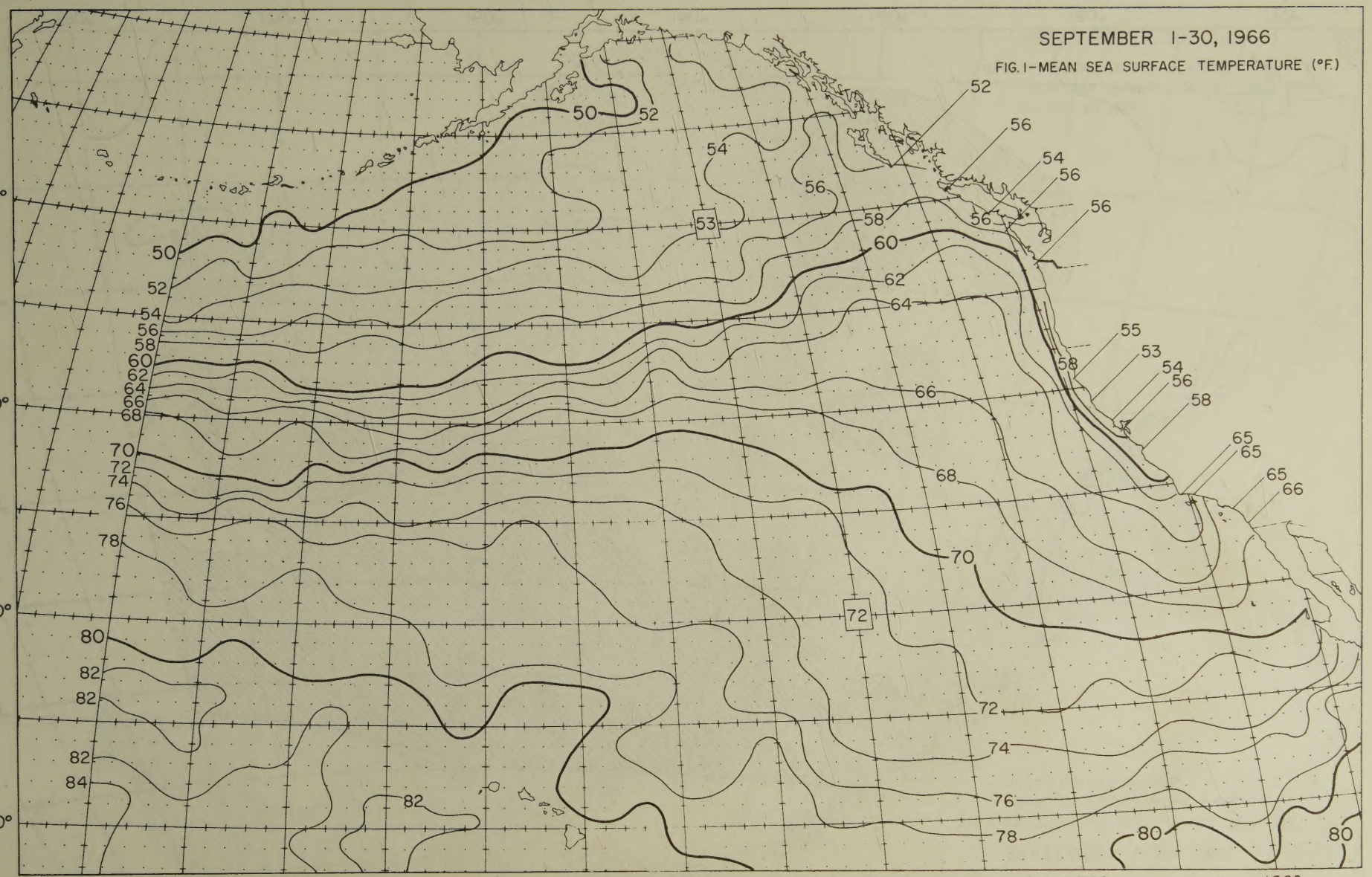
Figure 3.--Deviation of sea surface temperatures (°F) from those of September 1965. Hatched areas are colder in 1966.

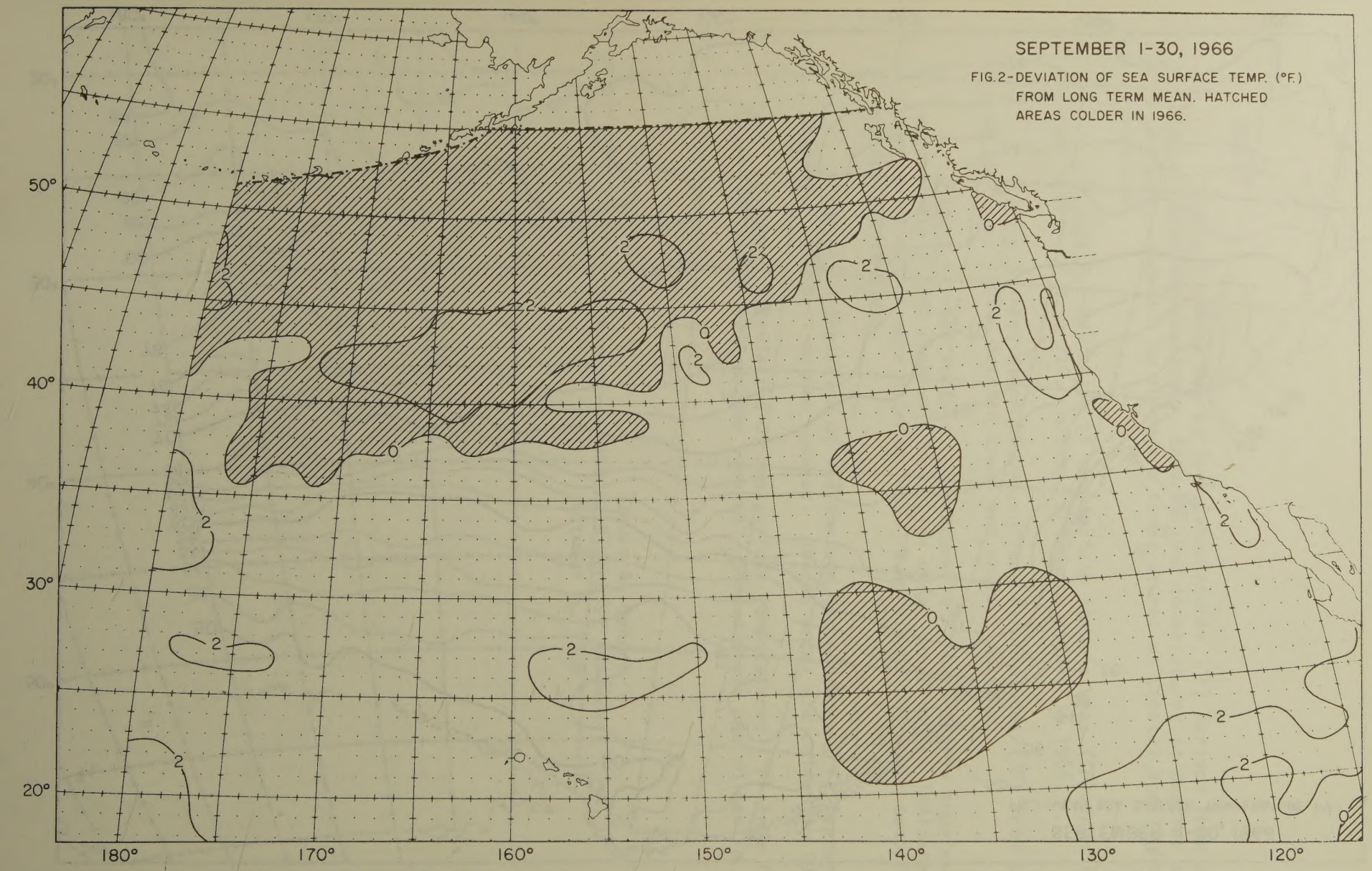
Figure 4.--Sea surface temperatures (°F) by 1-degree squares, approximately 2000 observations. Line under temperatures indicates average of two or more observations. Numerals on shore are temperatures at coastal stations.

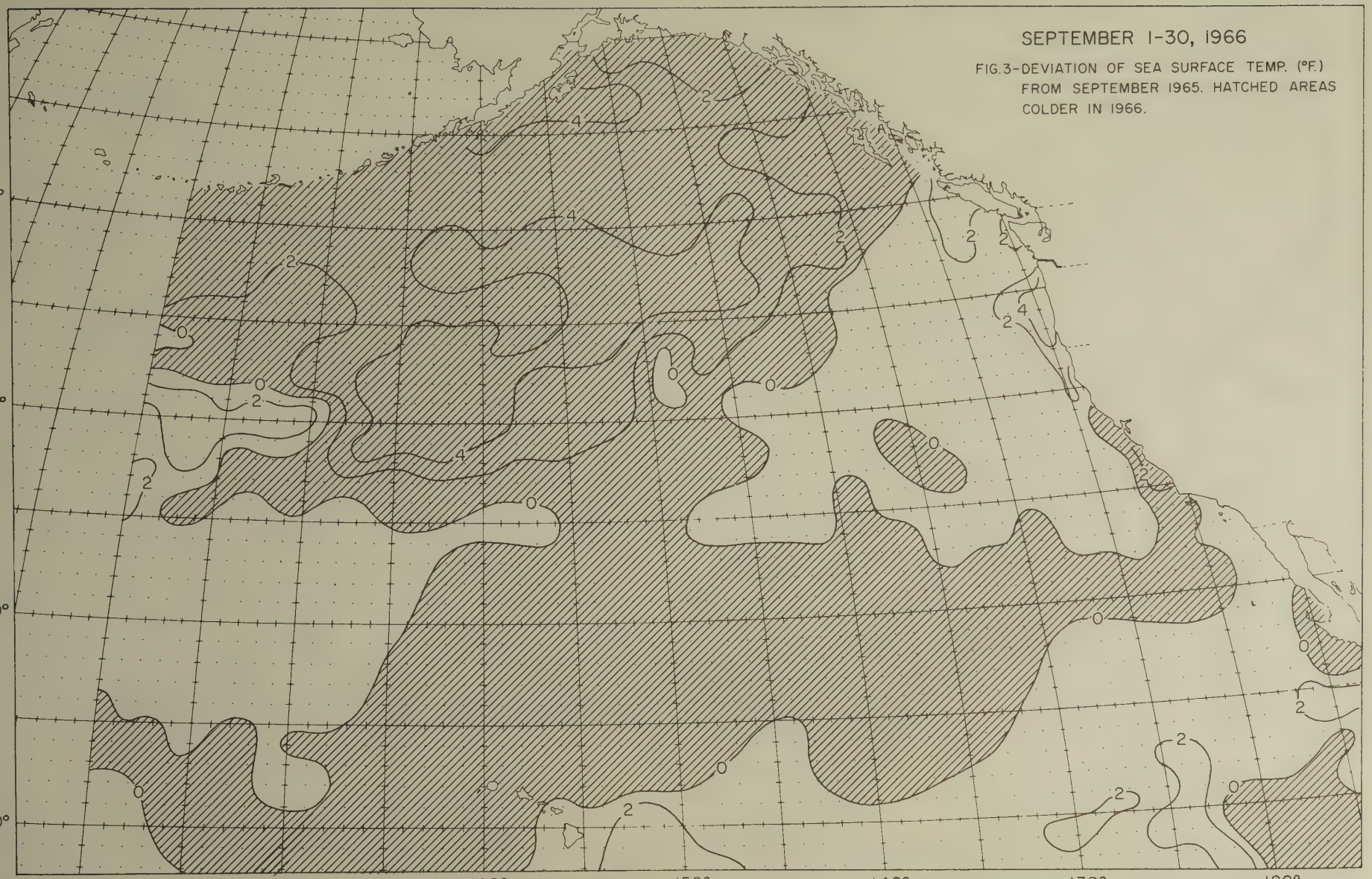
Figure 5.--Deviation of sea surface temperatures (°F) September 1966-September 1965 by 1-degree squares. Shaded areas are colder in 1966.

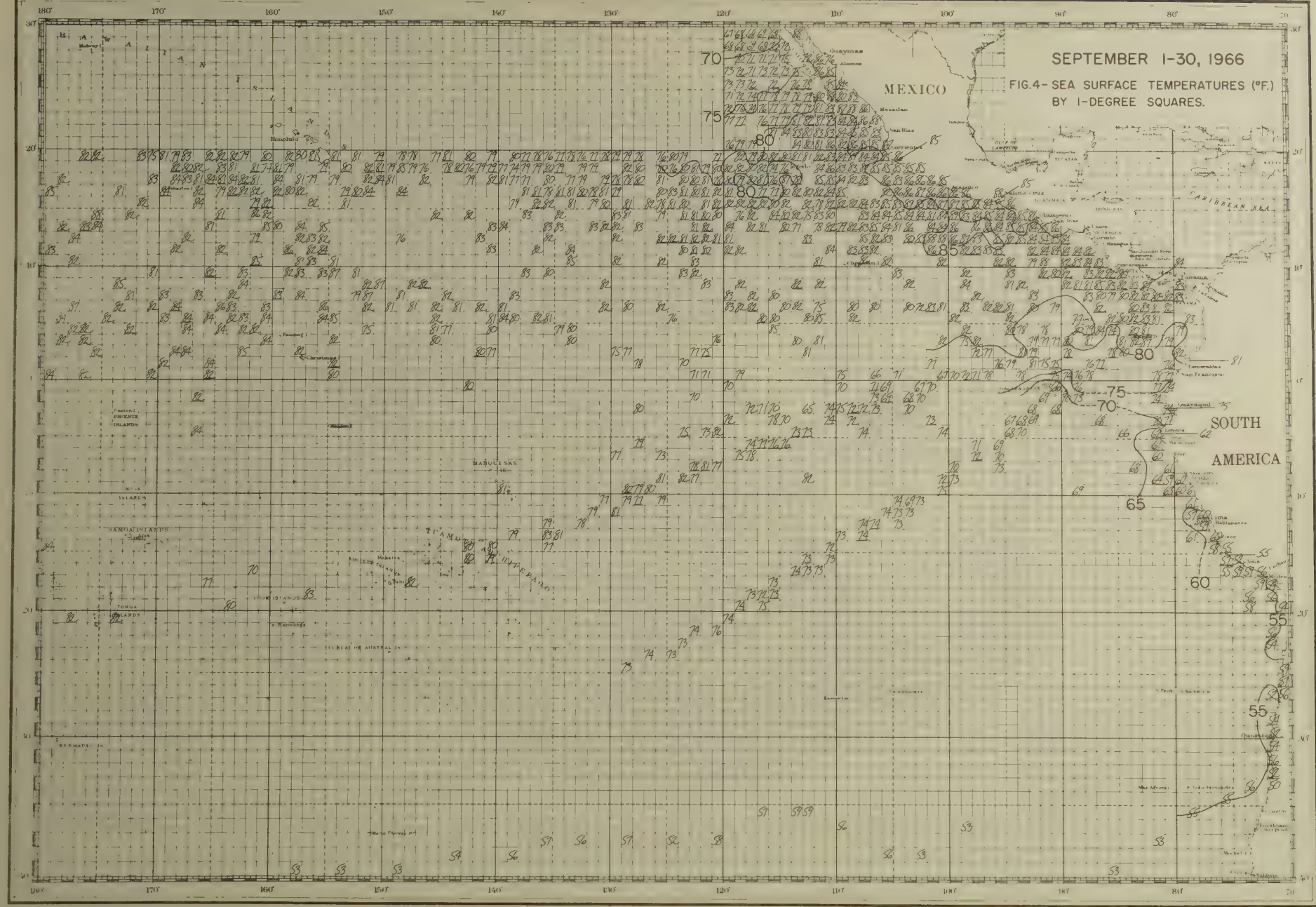
Figure 6.--Deviation of sea surface temperatures (°F) from 12-year mean (1947-1958) by 2-degree squares. Shaded areas are colder in 1966.

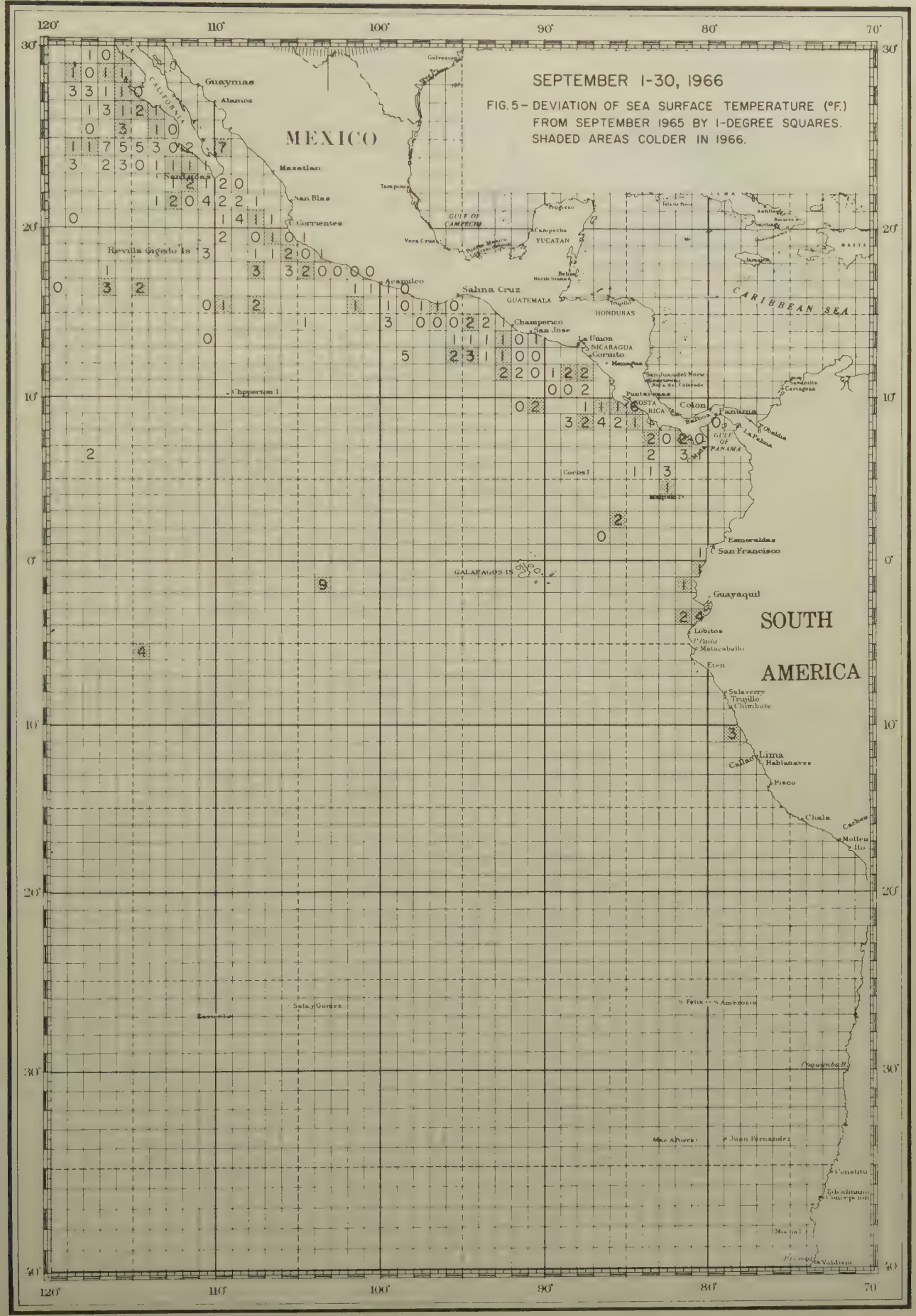
James A. Renner
Fishery Biologist (General)
October 6, 1966

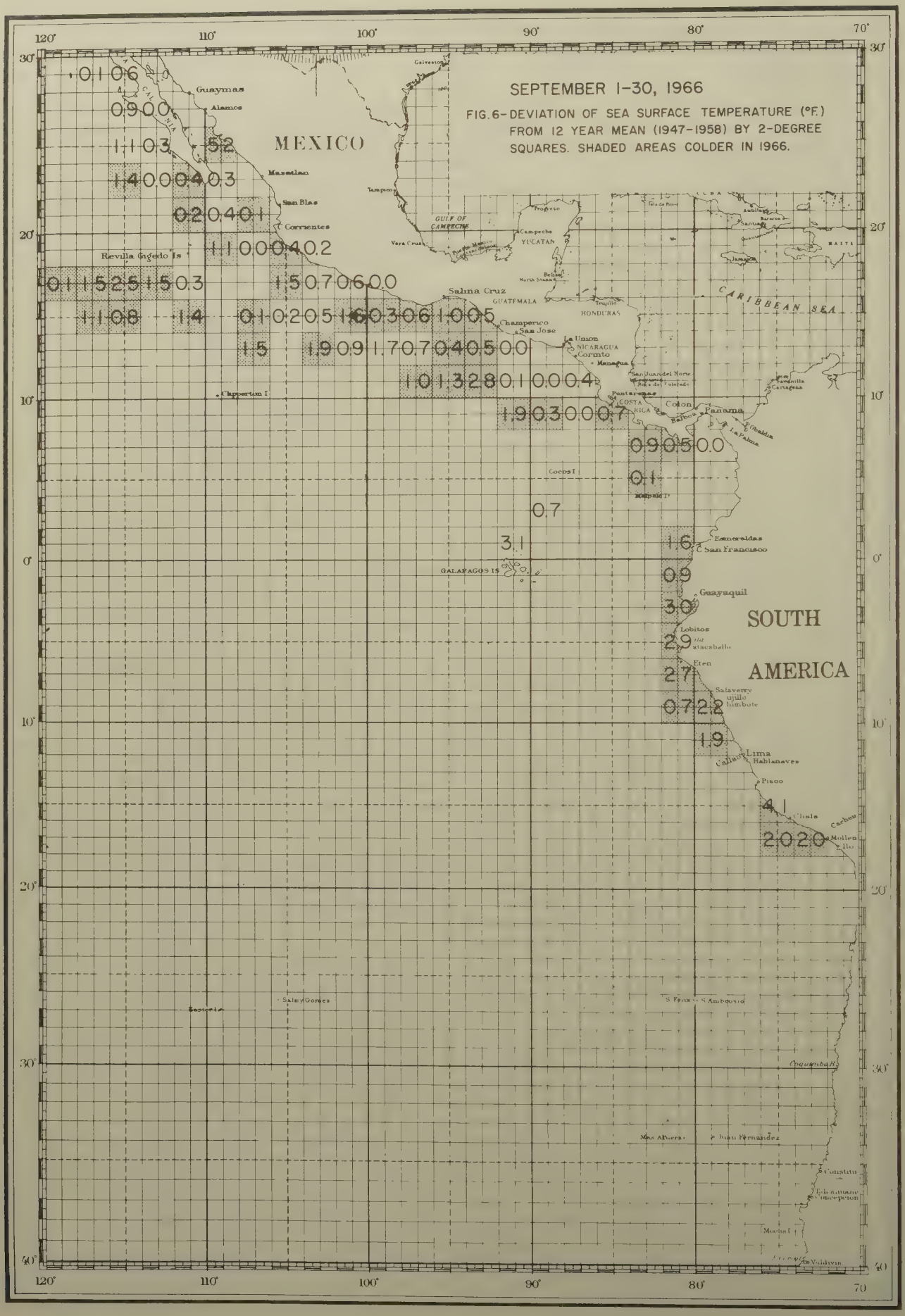

SEPTEMBER 1-30, 1966
FIG. 1-MEAN SEA SURFACE TEMPERATURE (°F.)
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°
50
52
54
56
58
60
62
64
66
68
70
72
74
76
78
80
82
84
53
72

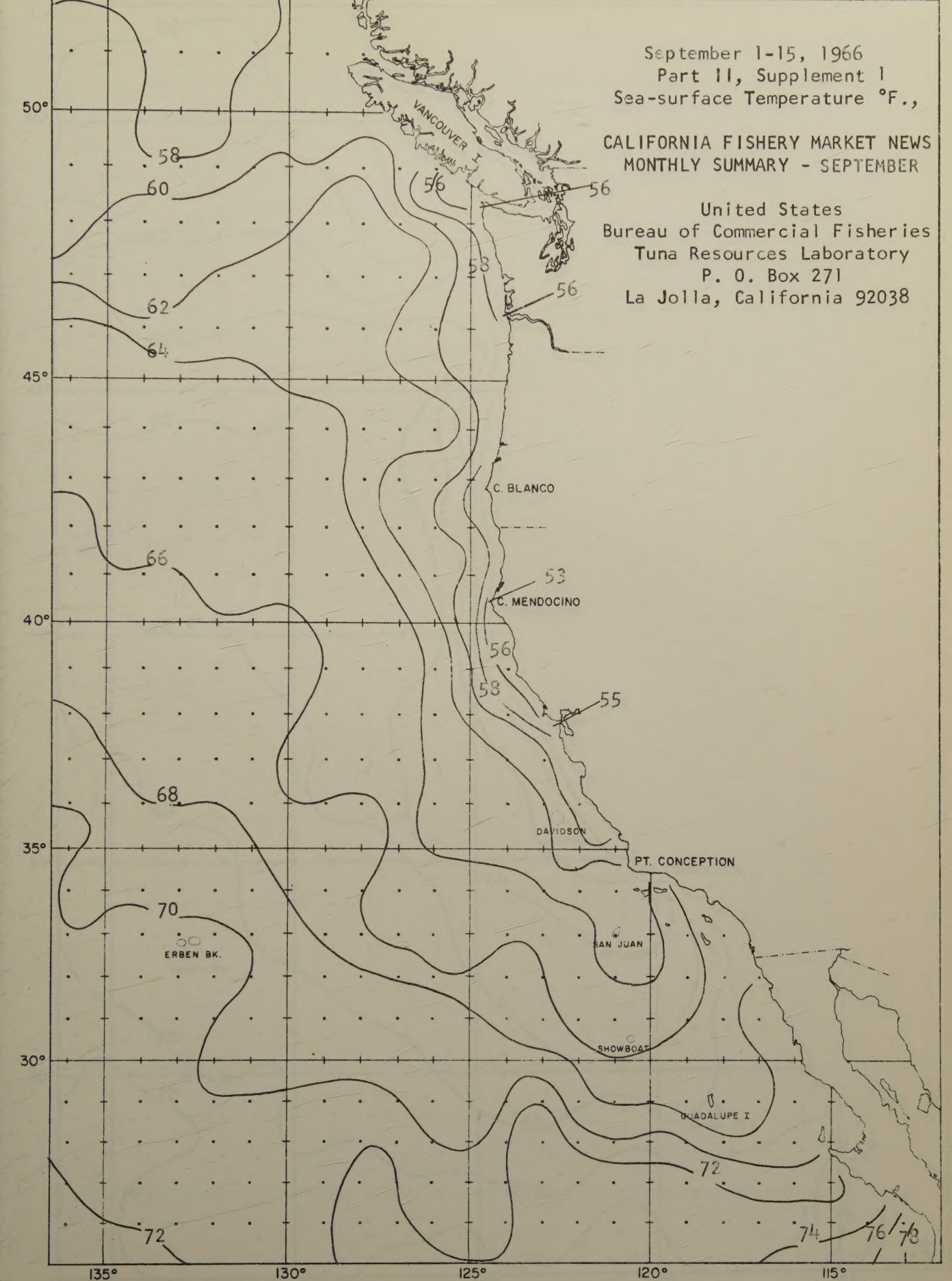

SEPTEMBER 1-30, 1966
FIG.2-DEVIATION OF SEA SURFACE TEMP. (°F.) FROM LONG TERM MEAN. HATCHED AREAS COLDER IN 1966.
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°
0
2


SEPTEMBER 1-30, 1966
FIG.3-DEVIATION OF SEA SURFACE TEMP. (°F.) FROM SEPTEMBER 1965. HATCHED AREAS COLDER IN 1966.
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°


SEPTEMBER 1-30, 1966
FIG.4- SEA SURFACE TEMPERATURES (°F.)
BY 1-DEGREE SQUARES.
MEXICO
SOUTH
AMERICA
CARIBBEAN SEA
Honolulu
MARQUESAS
SAMOA ISLANDS
TONGA
ISLANDS
PHOENIX
ISLANDS
TUAMOTU
ARCHIPELAGO
Lima
Guayaquil
Tumaco
Manta
Salinas
Panama
Tahiti
Nuku Hiva
Hiva Oa
Fatu Hiva
Easter I.
Juan Fernandez Is.
Valparaiso
Mas Afuera
Mas Afuera
Pisco
Callao
Chimbote
Salaverry
Paita
Talara
Tumbes
Puerto Armuelles
Buenaventura
Esmeraldas
San Francisco
Acapulco
Manzanillo
Mazatlan
San Blas
Salina Cruz
Tehuantepec
Champerico
Corinto
Puntarenas
Limon
Cristobal
Colon
Barranquilla
Cartagena
Maracaibo
Curacao
Aruba
Trinidad
Tobago
Grenada
Barbados
Martinique
Guadeloupe
Montserrat
Antigua
Virgin Is.
Puerto Rico
Dominican Republic
Haiti
Jamaica
Cuba
Yucatan
Belize
Honduras
Nicaragua
Costa Rica
Panama
Colombia
Venezuela
Ecuador
Peru
Chile
Bermuda
Azores
Canary Is.
Madeira
Cape Verde Is.
Galapagos Is.
Clipperton I.
Christmas I.
Fanning I.
Palmyra I.
Johnston I.
Howland I.
Baker I.
Jarvis I.
Line Is.
Gilbert Is.
Ellice Is.
Fiji Is.
Tuamotu Archipelago
Society Is.
Austral Is.
Cook Is.
Niue I.
Samoa Is.
Tonga Is.
Kermadec Is.
Phoenix Is.
Marquesas Is.
Tuamotu Is.
Line Is.
Gilbert Is.
Ellice Is.
Fiji Is.


SEPTEMBER 1-30, 1966
FIG. 5 – DEVIATION OF SEA SURFACE TEMPERATURE (°F.) FROM SEPTEMBER 1965 BY 1-DEGREE SQUARES. SHADED AREAS COLDER IN 1966.
MEXICO
SOUTH AMERICA
CARIBBEAN SEA
GULF OF CAMPECHE
GULF OF PANAMA
GALAPAGOS IS
Guaymas
Alamos
Mazatlan
San Blas
Corrientes
Acapulco
Salina Cruz
GUATEMALA
HONDURAS
NICARAGUA
COSTA RICA
Panama
Colon
Balboa
Esmeraldas
San Francisco
Guayaquil
Lobitos
Talara
Eten
Salaverry
Trujillo
Chimbote
Callao
Lima
Pisco
Chala
Mollendo
Ilo
Arica
Iquique
Juan Fernandez
Valdivia
Tampico
Progreso
Campeche
YUCATAN
Vera Cruz
Galveston
Cuba
Jamaica
Haiti
Trinidad
Cartagena
Maracaibo
Curacao
Aruba
Caracas
Barbados
Tobago
Cocos I
Chipperton I
Revilla Gigedo Is
Cabo San Lucas
Sala y Gomez
Easter I
Mas Afuera
Mas Tierra
Concepcion
Constitucion
30°
20°
10°
0°
120°
110°
100°
90°
80°
70°


SEPTEMBER 1-30, 1966
FIG. 6- DEVIATION OF SEA SURFACE TEMPERATURE (°F.) FROM 12 YEAR MEAN (1947-1958) BY 2-DEGREE SQUARES. SHADED AREAS COLDER IN 1966.
MEXICO
SOUTH AMERICA
CARIBBEAN SEA
GULF OF CAMPECHE
GALAPAGOS IS
Guaymas
Alamos
Mazatlan
San Blas
Corrientes
Revilla Gigedo Is
Salina Cruz
GUATEMALA
HONDURAS
Champerico
San Jose
La Union
NICARAGUA
Corinto
Managua
Puntarenas
COSTA RICA
Colon
Panama
Cocos I
Esmeraldas
San Francisco
Guayaquil
Lobitos
Eten
Salaverry
Lima
Callao
Pisco
Cabo Blanco
Galveston
Tampico
Vera Cruz
Campeche
YUCATAN
Progreso
Belize
Trujillo
Tela de Fuego
Jamaica
HAITI
Barranquilla
Cartagena
Bahia
Chimbote
Huacho
Salas y Gomez
S. Felix
S. Ambrosio
Easter I
Juan Fernandez
Concepcion
Valdivia
Chippertim I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Sea-surface Temperature °F.,
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United States
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P. O. Box 271
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VANCOUVER I
C. BLANCO
C. MENDOCINO
DAVIDSON
PT. CONCEPTION
SAN JUAN
SHOWBOAT
GUADALUPE I
ERBEN BK.
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62
64
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58
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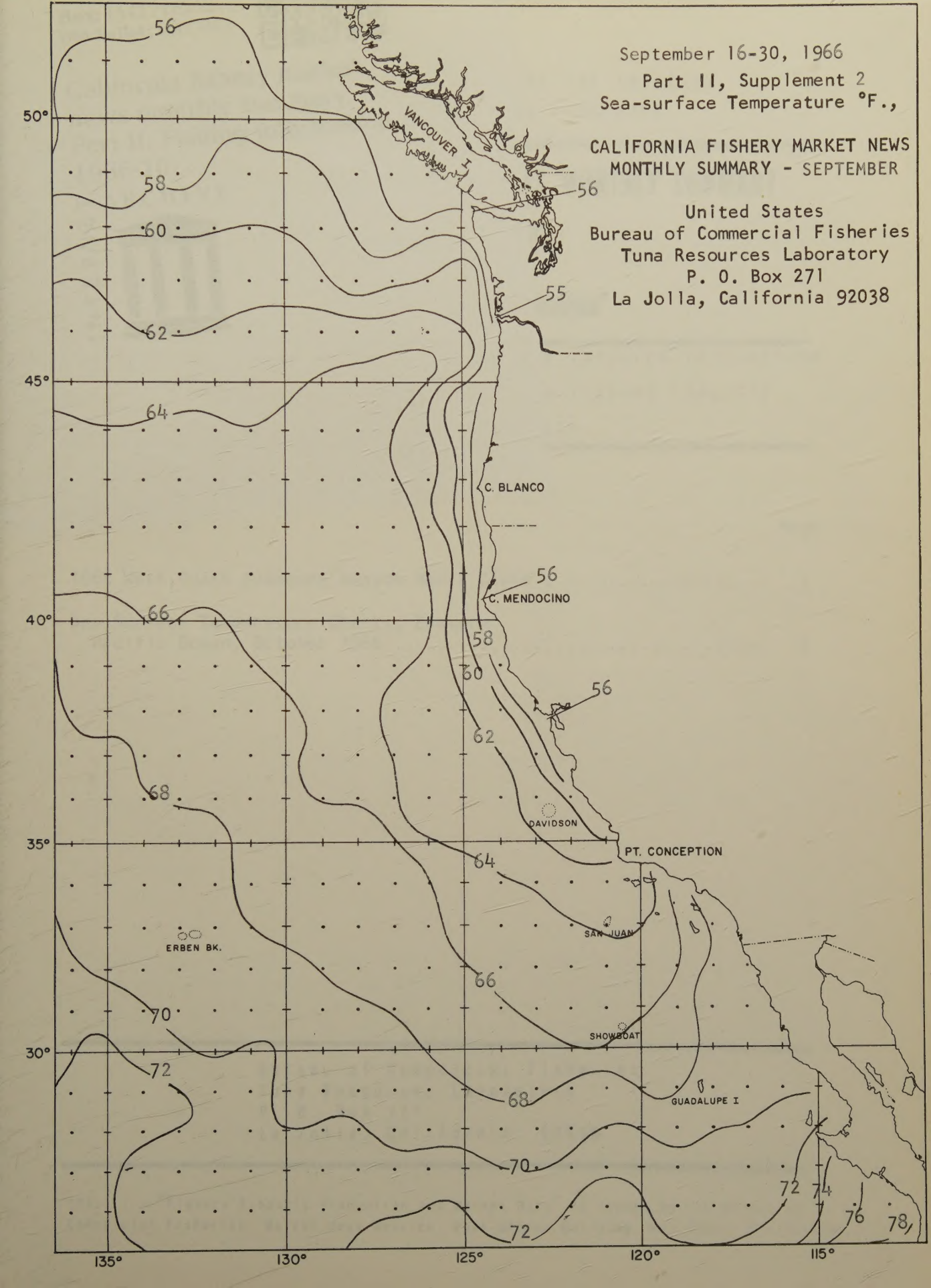
50°
45°
40°
35°
30°
135°
130°
125°
120°
115°


September 16-30, 1966
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Sea-surface Temperature °F.,
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VANCOUVER I.
C. BLANCO
C. MENDOCINO
DAVIDSON
PT. CONCEPTION
SAN JUAN
SHOWBOAT
ERBEN BK.
GUADALUPE I
50°
45°
40°
35°
30°
135°
130°
125°
120°
115°
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